

AMENDMENT UNDER 37 C.F.R. § 1.111
Application Serial No. 10/508,862
Attorney Docket No. Q83761

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A device for ~~the~~ infusion of coffee, ~~which comprises~~comprising:

a heat exchanger (1), provided with water inlet means and water outlet means at a higher temperature;

an infusion mechanism (2), that comprises a water inlet chamber (25) coming from the heat exchanger (1) and an outlet chamber (26) adapted for receiving ~~the~~a dosage; and

a coffee dosage carrying mechanism (3) coupled to the infusion mechanism (2),

~~the device being characterised in that~~wherein the heat exchanger (1), the infusion mechanism (2) and the dosage carrying mechanism (3) are respectively coupled together vertically and integrally in continuation ~~from the other~~ and defining a longitudinal axis (Y-Y),

~~and in that~~wherein the dosage carrying mechanism (3) comprises a dosage carrying body (30) in which the dosage is placed, and a longitudinal movement mechanism provided with a drive arm (31), ~~capable of rotating~~rotatable in both directions around said longitudinal axis (Y-Y), ~~all of which is adapted in such a way that, once the dosage has been placed in a dosage carrying body (30) of the dosage carrying mechanism (3), the~~ such that rotation of the drive arm (31) in ~~one~~a first direction brings about the upward vertical movement of the dosage carrying

AMENDMENT UNDER 37 C.F.R. § 1.111
Application Serial No. 10/508,862
Attorney Docket No. Q83761

body dosage, placing it in raising the dosage carrying body (30) to the infusion mechanism (2)
outlet chamber (26), whereas the wherein rotation of the drive arm (31) in the opposite a second
direction, which is opposed to the first direction, to the previous one brings about the downward
movement of the dosage used dosage carrying body (30), thereby allowing its extraction the
dosage to be extracted,

wherein the dosage is placed in the dosage carrying body for infusion and extracted from
the dosage carrying body after infusion without detaching the dosage carrying mechanism from
the infusion mechanism.

2. (currently amended): A The device according to claim 1, ~~which is characterised in~~
~~that~~wherein the infusion mechanism (2) comprises an intermediate body (4) fastened to the heat
exchanger (1) and provided with a stepped ~~centred~~centered through orifice (12), ~~configuring~~
which includes three successive portions in progressively decreasing section from top to bottom,
in which the upper portion (13) is adapted for housing a tightening discoidal element (5),
provided with a ~~centred~~centered through orifice for the water coming from the heat exchanger
(1), and a membrane (7), the water inlet chamber (25) being defined between the discoidal
element (5) and the membrane (7), whereas the intermediate portion (14) and the lower portion
(15) are adapted for housing a piston (8) provided with a ~~centred~~centered through orifice (17), in
which a retention valve (9), integral to the membrane (7) is housed and, at its lower end, to a
cavity which configures the outlet chamber (26).

3. (currently amended): ~~A-The device according to claim 1, which is characterised in that~~wherein the dosage carrying mechanism (3) comprises a tubular body (28) that houses a thrust body (29) and a dosage carrying body (30), ~~the tubular body (28), the thrust body (29) and the dosage carrying body (30)~~all of them being arranged co-axially and mutually coupled, in which the tubular body (28) is provided at its upper end with means (32, 33) for fastening the tubular body (28) to its fastening to the intermediate body (4) of the infusion mechanism (2), and laterally, ~~has the tubular body (28) including~~ spacious apertures (34) adapted for allowing the dosage to pass therethrough, before and after being used, and, at ~~its a lower end of the tubular body (28), has~~ means (35, 37, 38, 39) for ~~the coupling of the thrust body (29) and of the dosage carrying body (30)~~ which are disposed within;

wherein the thrust body (29) is fastened to the drive arm (31) and ~~has a centred~~ includes a centered through orifice (49); and the dosage carrying body (30) ~~has~~ includes a cavity (43) for receiving a dosage and ~~has outlet means (44, 45) an infusion outlet of the infusion which go through the centred~~ centered through orifice (49) of the thrust body (29).

4. (currently amended): ~~A-The device according to claim 1, which is characterised in that~~wherein the longitudinal movement mechanism comprises, both in the thrust body (29) and laterally, two radial thrust protuberances (40) adapted for being housed in respective thrust helicoidal grooves (46) which the dosage carrying body (30) is provided with, the dosage

AMENDMENT UNDER 37 C.F.R. § 1.111
Application Serial No. 10/508,862
Attorney Docket No. Q83761

carrying body (30) also being provided with two radial guide protuberances (47) adapted for being housed in respective guide grooves (36) which the tubular body (28) is provided with, ~~all of it being adapted in such a way,~~

~~that the~~ wherein rotation of the drive arm (31) causes the thrust body (29) to turn and the sliding of the radial thrust protuberances (40) through the thrust helicoidal grooves (46) of the dosage carrying body (30), which is thrust vertically, guided by the radial guide protuberances (47) through the guide grooves (36) in the direction corresponding to the rotation of the drive arm (31).

5. (currently amended): A The device according to claim 2, ~~which is characterised in that~~ wherein the dosage carrying mechanism (3) comprises a tubular body (28) that houses a thrust body (29) and a dosage carrying body (30), the tubular body (28), the thrust body (29) and the dosage carrying body (30) ~~all of them~~ being arranged co-axially and mutually coupled, in which the tubular body (28) is provided at its an upper end with means (32, 33) for its fastening the tubular body (28) to the intermediate body (4) of the infusion mechanism (2), said tubular body (28) ~~and laterally, has spacious including spacious~~ apertures (34) adapted for allowing the dosage to pass therethrough, before and after being used, and, at its a lower end, the tubular body (28) ~~has further including~~ means (35, 37, 38, 39) for ~~the coupling of~~ the thrust body (29) and of the dosage carrying body (30);

AMENDMENT UNDER 37 C.F.R. § 1.111
Application Serial No. 10/508,862
Attorney Docket No. Q83761

wherein the thrust body (29) is fastened to the drive arm (31) and ~~has~~ includes a ~~centred~~ centered through orifice (49); and the dosage carrying body (30) ~~has~~ includes a cavity (43) for receiving a dosage and ~~has~~ outlet means (44, 45) ~~of for the infusion of the dosage~~ which go through the ~~centred~~ centered through orifice (49) of the thrust body (29).

6. (currently amended): ~~A~~ The device according to claim 2, ~~which is characterised in that~~ wherein the longitudinal movement mechanism comprises, both in the thrust body (29) and laterally, two radial thrust protuberances (40) adapted for being housed in respective thrust helicoidal grooves (46) ~~which of the dosage carrying body (30) is provided with, the dosage carrying body (30) also being provided with~~ including two radial guide protuberances (47) ~~adapted for being that are~~ housed in respective guide grooves (36) ~~which of the tubular body (28) is provided with, all of it being adapted in such a way~~ such that the rotation of the drive arm (31) causes the thrust body (29) to turn and ~~the sliding of the radial thrust protuberances (40) to slide~~ through the thrust helicoidal grooves (46) of the dosage carrying body (30), which is thrust vertically, guided by the radial guide protuberances (47) through the guide grooves (36) in ~~the a~~ direction corresponding to the rotation of the drive arm (31).

7. (currently amended): ~~A~~ The device according to claim 3, ~~which is characterised in that~~ wherein the longitudinal movement mechanism comprises, both in the thrust body (29) and laterally, two radial thrust protuberances (40) adapted for being housed in respective thrust

AMENDMENT UNDER 37 C.F.R. § 1.111
Application Serial No. 10/508,862
Attorney Docket No. Q83761

helicoidal grooves (46) which the dosage carrying body (30) is provided with, the dosage carrying body (30) also being provided with two radial guide protuberances (47) adapted for being housed in respective guide grooves (36) which the tubular body (28) is provided with, ~~all of it being adapted in such a way that~~ wherein the rotation of the drive arm (31) causes the thrust body (29) to turn and the sliding of the radial thrust protuberances (40) through the thrust helicoidal grooves (46) of the dosage carrying body (30), which is thrust vertically, guided by the radial guide protuberances (47) through the guide grooves (36) in ~~the~~ a direction corresponding to the rotation of the drive arm (31).

8. (new): An infusion device comprising:

a heat exchanger including a fluid inlet which receives fluid and a fluid outlet which releases fluid at higher temperature for infusion of a dosage;

an infusion mechanism coupled to the heat exchanger, the infusion mechanism including a fluid inlet chamber that receives fluid from the fluid outlet of the fluid chamber and an outlet chamber which receives the dosage;

a dosage carrying mechanism including an outer body fastened to the infusion mechanism, a dosage carrying body within said outer body, a thrust body movably coupled to the dosage carrying body that moves at least one of the dosage carrying body and the infusion mechanism in a first direction so as to bring them closer for the infusion of the dosage and in a second direction for extraction of the dosage after infusion,

wherein the outer body includes at least one side opening adapted to receive the dosage therethrough for placement and extraction of the dosage on the dosage carrying body without detaching the dosage carrying mechanism from the infusion mechanism.

9. (new): The infusion device according to claim 8, wherein the thrust body vertically moves the dosage carrying body in the first direction longitudinally toward the infusion mechanism for the infusion of the dosage and in the second direction longitudinally away from the infusion mechanism for extraction of the dosage after infusion.

10. (new): The infusion device according to claim 8, wherein the dosage carrying mechanism further comprises a manual drive arm rotatable in both directions about a longitudinal axis, whereby rotation of the manual drive arm in one direction about the longitudinal axis rotates the thrust body.

11. (new): The infusion device according to claim 10, wherein the dosage chamber and the thrust body are movably coupled such that rotation of the drive arm in a first axial direction raises the dosage carrying body vertically upward from a lowered position to a raised position, where the dosage chamber and the infusion chamber are held in contact to infuse the dosage with fluid from the heat exchanger, and rotation of the drive arm in a second axial direction lowers the dosage carrying body vertically downward from the inlet chamber of the infusion mechanism to

AMENDMENT UNDER 37 C.F.R. § 1.111
Application Serial No. 10/508,862
Attorney Docket No. Q83761

the lowered position, where the infusion dosage may be extracted via said at least one side opening without detaching the dosage carrying mechanism from the infusion mechanism.

12. (new): The infusion device according to claim 10, wherein the dosage carrying body, which is coupled to the thrust body, slidably moves between the lowered position and the raised position without rotation while the thrust body is rotated by the drive arm.

13. (new): The infusion device according to claim 12, wherein the dosage carrying body is coupled to the thrust body by a plurality of grooves that translate rotational movement of the drive arm into vertical movement of the dosage carrying body such that the dosage carrying body does not rotate during the rotational movement of the drive arm.

14. (new): The infusion device according to claim 8, wherein the dosage carrying mechanism comprises a longitudinal movement mechanism that includes, both in the thrust body and laterally, two radial thrust protuberances adapted for being housed in respective thrust helicoidal grooves which the dosage carrying body is provided with, the dosage carrying body also being provided with two radial guide protuberances adapted for being housed in respective guide grooves which the tubular body is provided with, such that rotation of the drive arm causes the thrust body to turn and the sliding of the radial thrust protuberances through the thrust helicoidal grooves of the dosage carrying body, which is thrust vertically, guided by the radial

AMENDMENT UNDER 37 C.F.R. § 1.111
Application Serial No. 10/508,862
Attorney Docket No. Q83761

guide protuberances through the guide grooves in the direction corresponding to the rotation of the drive arm.